

Audit



Report

OFFICE OF THE INSPECTOR GENERAL

**DEFENSE BUSINESS OPERATIONS FUND
INVENTORY RECORD ACCURACY**

Report No. 98-072

February 12, 1998

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Department of Defense

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Acronyms

CFO	Chief Financial Officers
DBOF	Defense Business Operations Fund
DLA	Defense Logistics Agency
ICPs	Inventory Control Point
IG	Inspector General
NSN	National Stock Number

February 12, 1998

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (COMPTROLLER)
DEPUTY UNDER SECRETARY OF DEFENSE
(LOGISTICS)
DIRECTOR, DEFENSE FINANCE AND ACCOUNTING
SERVICE
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Audit Report on Defense Business Operations Fund Inventory Record
Accuracy (Report No. 98-072)

We are providing this report for review and comments. This is the fourth in a series of reports on FY 1996 inventory accounts of the Defense Business Operations Fund. In preparing the final report, we considered comments from the Acting Deputy Under Secretary of Defense (Logistics) and the Defense Logistics Agency on the draft of this report.

Comments from the Acting Deputy Under Secretary of Defense (Logistics) were partially responsive. The Acting Deputy Under Secretary of Defense (Logistics) proposed an alternative action that satisfied the intent of the recommendations. However, the comments did not give completion dates for implementing the corrective actions. DoD Directive 7650.3 requires that all recommendations be resolved promptly. We request that the Acting Deputy Under Secretary of Defense (Logistics) provide comments on the final report by April 13, 1998.

Comments from the Defense Logistics Agency were responsive; therefore, additional comments are not required.

The courtesies extended to the audit staff are appreciated. Questions on the audit should be directed to Mr. James L. Kornides, Audit Program Director, at (614) 751-1400, extension 11, e-mail JKornides@DODIG.OSD.MIL, or Mr. Joel K. Chaney, Audit Project Manager, at (216) 522-6091 (DSN 580-6091), extension 235, e-mail JChaney@DODIG.OSD.MIL. See Appendix D for the report distribution. The audit team members are listed inside the back cover.



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Office of the Inspector General, DoD

Report No. 98-072
Project No. 5FJ-2018.03

February 12, 1998

Defense Business Operations Fund Inventory Record Accuracy

Executive Summary

Introduction. The inventory of the Defense Business Operations Fund consisted of consumable and repairable materiel used by DoD Components and other Government agencies to sustain operations. In FY 1996, inventory was the most significant asset category in the Defense Business Operations Fund financial statements. At September 30, 1996, Defense Business Operations Fund inventory totaled \$57.1 billion, or about 64 percent of the Defense Business Operations Fund assets. This report is the fourth in a series of reports on inventory issues in the Defense Business Operations Fund. Two earlier reports discussed inventory accounting problems at the Defense Depots in Columbus, Ohio, and Susquehanna, Pennsylvania. A third report discussed management controls over inventory at the Defense Logistics Agency distribution depots. In December 1996, the Under Secretary of Defense (Comptroller) announced that the Defense Business Operations Fund would be realigned into separate Working Capital Funds. This realignment does not affect matters discussed in this report. However, the realignment will affect the design of the annual statistical sample discussed in Finding B.

Audit Objectives. The overall objective of the audit was to determine whether inventory amounts on the FY 1996 Defense Business Operations Fund Consolidated Financial Statements were presented fairly in accordance with the other comprehensive basis of accounting described in Office of Management and Budget Bulletin No. 94-01, "Form and Content of Agency Financial Statements," November 16, 1993. We limited the audit to evaluating the accuracy of the perpetual inventory records for on-hand inventory maintained by the DoD inventory control points and retail storage activities. The audit was limited because DoD management had not developed and executed a DBOF-wide sample; we developed a sample to test inventory record accuracy. The time and resources required to develop and execute the sample prohibited us from testing other aspects of inventory needed to fully audit Inventory, Net. The other aspects included consigned and in-use inventory (\$4.7 billion); inventory in-transit (\$9.6 billion); adjustments, such as inventory revaluation to latest acquisition cost (\$21.7 billion); and the allowance for inventory holding gains and losses (\$21.1 billion). We also evaluated the adequacy of the DoD and Defense Logistics Agency management control programs as they related to the audit objectives.

Audit Results. The inventory records of the Defense Business Operations Fund were not accurate. An estimated 15.8 percent, or about one of every six inventory records represented by our sampling, was in error. The errors caused inventory records to be misstated (overstated and understated) by an estimated \$3.9 billion. The net misstatement resulting from those errors was an estimated \$336.3 million understatement of the \$89 billion of on-hand inventory used to prepare the FY 1996 Defense Business Operations Fund financial statements. That net amount of error made the value of the sampled portion of Defense Business Operations Fund inventory on the financial statements appear accurate because the overstated amounts offset most of the

understated amounts. However, the 15.8 percent error rate represented a material management control weakness. The inaccurate records greatly limited the reliability of the financial data. Inaccurate inventory records also distorted the reports used by inventory managers who made decisions to buy materiel. Additionally, the inaccurate records can reduce the effectiveness of logistics support when military customers urgently need inventory (Finding A).

DoD inventory control points and retail storage activities did not implement a plan to conduct an annual statistical sample of the FY 1996 Defense Business Operations Fund inventory, as required by DoD policy. As a result, the Under Secretary of Defense (Comptroller) did not have a sound basis for his assertions that inventory reported in the Defense Business Operations Fund financial statements was accurate and complete (Finding B). See Appendix A for details of the management control program.

Summary of Recommendations. We recommend that the Director, Defense Logistics Agency, expedite actions to correct the automated location reconciliation program to provide periodic reconciliation of the Defense Logistics Agency inventory control points' inventory records with the records maintained by Defense Logistics Agency distribution depots, Military Department depots, and other storage sites. The actions should include establishing a schedule for implementing the reconciliation program and evaluating the causes of significant discrepancies found during the reconciliations. In addition, we recommend that the Deputy Under Secretary of Defense (Logistics), in coordination with the Under Secretary of Defense (Comptroller), establish the framework for the annual statistical samples of wholesale and retail inventory records, assign a central management official to oversee the development of the samples, and direct the Military Departments and the Defense Logistics Agency to perform the samples.

Management Comments. The Acting Deputy Under Secretary of Defense (Logistics) listed actions that will be taken to establish the framework for the annual statistical samples and proposed an alternative method for sampling to assess the accuracy of the wholesale and retail inventory records. Each Military Department and the Defense Logistics Agency will be responsible for establishing the methodology and developing samples to assess the accuracy of inventory records. The Deputy Director, Defense Logistics Agency, identified actions taken to correct and implement the automated location reconciliation program and to implement a program for researching and evaluating discrepancies identified during the reconciliation. See Part I for a discussion of management comments and Part III for the complete text of management comments.

Audit Response. The actions proposed by the Acting Deputy Under Secretary of Defense (Logistics) satisfy the intent of the recommendation. However, the Acting Deputy Under Secretary of Defense (Logistics) did not give completion dates for conducting annual statistical samples of inventory records. We request that the Acting Deputy Under Secretary of Defense (Logistics) provide comments on the final report by April 13, 1998, and include completion dates. Comments from the Defense Logistics Agency were responsive; therefore, additional comments are not required.

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Part I - Audit Results

Audit Background

The Defense Business Operations Fund (DBOF), a revolving fund, was established by the Secretary of Defense on October 1, 1991. The purpose of DBOF was to standardize, consolidate, and improve systems and operations and to reduce the costs of providing support services to DoD organizations. In December 1996, the Under Secretary of Defense (Comptroller) announced that the DBOF would be realigned into separate Working Capital Funds. The realignment does not affect the matters discussed in this report, because the Working Capital Funds will have inventory and because accountability over inventory will continue to require management attention. However, beginning in FY 1997, separate financial statement audit opinions will be issued for each Working Capital Fund.

At the time DBOF was established, the Supply Management Business Area of each Military Department and DLA was established as a separate business area for inventory management. DBOF on-hand inventory consists of consumable and repairable materiel. The Supply Management Business Area provides for procuring, storing, and selling the DBOF inventory to DoD Components and other Government agencies. Inventory is the most significant category of assets in the DBOF financial statements. At the end of FY 1996, DBOF Inventory, Net totaled \$57.1 billion, or about 64 percent of the total DBOF assets.

Public Law 101-576, the "Chief Financial Officers Act of 1990" (the CFO Act), November 15, 1990, as amended by Public Law 103-356, the "Federal Financial Management Act of 1994," October 13, 1994, requires DoD to prepare, on an annual basis, audited financial statements for the preceding year and submit them to the Director, Office of Management and Budget. The financial statements report the financial position and results of operations of the DoD Components and business activities.

Audit Objectives

The audit objective was to determine whether inventory amounts on the FY 1996 DBOF Consolidated Financial Statements were presented fairly in accordance with the other comprehensive basis of accounting described in Office of Management and Budget Bulletin No. 94-01, "Form and Content of Agency Financial Statements," November 16, 1993. We limited the audit to evaluating the accuracy of the perpetual inventory records for on-hand inventory maintained by the DoD Inventory Control Points and Retail Storage Activities.

The audit was limited because DoD management had not developed and executed a DBOF-wide sample; we developed a sample to test inventory record accuracy. The time and resources required to develop and execute the sample prohibited us from testing other aspects of inventory needed to fully audit Inventory, Net. The other aspects included consigned and in-use inventory (\$4.7 billion); inventory in-transit (\$9.6 billion); adjustments, such as inventory revaluation to latest acquisition cost (\$21.7 billion); and the allowance for inventory holding gains and losses (\$21.1 billion). See Appendix A for a discussion of the audit process and the review of the management control program.

Finding A. Inventory Record Accuracy

DBOF inventory records were not accurate. An estimated 15.8 percent, or about one of every six DBOF inventory records represented by our sampling, was in error (see Appendix A for confidence level and precision of estimates). The errors caused DBOF inventory records to be misstated (overstated and understated) by an estimated \$3.9 billion. The net amount of those errors was an estimated \$336.3 million understatement of the \$89 billion of on-hand inventory used to prepare the FY 1996 DBOF financial statements. That net amount of error made the value of the sampled portion of DBOF inventory on the financial statements appear accurate because the overstated amounts offset most of the understated amounts. However, the 15.8 percent error rate represented a material management control weakness.

The inaccurate perpetual inventory records existed because inventory records maintained by the DLA distribution depots and Military Department depots were not reconciled with the inventory records maintained by the DLA inventory control points (ICPs), and because various errors occurred in processing inventory transactions. The inaccurate records greatly limited the reliability of the financial data. Inaccurate inventory records also distorted the reports used by inventory managers who were making decisions to buy materials. The inaccurate records can reduce the effectiveness of logistics support when military customers urgently need inventory .

Inventory Record Management

The Military Departments and DLA used perpetual inventory systems to manage wholesale inventories (at DLA distribution depots and Military Department depots) and retail inventories (at military bases). The inventory systems maintained a continuous record of inventory, increasing the on-hand balance when stock was received, decreasing the balance when stock was issued, and adjusting the balance based on the results of physical inventories.

The perpetual inventory systems accounted for inventory on an item-by-item basis; each item had a unique National Stock Number (NSN). The perpetual inventory records were used to update the financial inventory accounts in the DBOF general ledger as of September 30, 1996.

The logistics records for inventory were used to establish the financial value of on-hand inventory as of September 30, 1996. At that time, on-hand inventory

Finding A. Inventory Record Accuracy

in the Military Departments and DLA totaled \$89 billion. The majority (approximately 75 percent of the value) of that inventory was stored at 23 DLA distribution depots. The remainder was stored at Military Department depots and retail storage activities worldwide.

In the FY 1996 DBOF financial statements, the value of on-hand inventory was adjusted to the latest acquisition cost, the latest acquisition price net of repair cost, or the net realizable value, depending on the condition of the materiel.

In the FY 1996 DBOF Consolidated Financial Statements, the Military Departments and DLA reported DBOF-owned inventory with a latest acquisition cost of \$57.1 billion after adjustment.

Evaluation of Inventory Record Accuracy

We used a multistage stratified statistical sample to assess the overall accuracy of the DBOF perpetual inventory records. As part of the audit tests, we observed the physical inventory process for 2,878 NSNs at 16 DLA distribution depots, 2 Military Department depots, and 13 retail storage activities. The 31 activities stored about \$62.2 billion of the \$89 billion.

The results showed that the perpetual inventory records were inaccurate for an estimated 15.8 percent of the NSNs represented by our sampling. The errors caused DBOF inventory records to be misstated (overstated and understated) by an estimated \$3.9 billion.

Effect on Accuracy of Financial Statements. The net amount of those errors was an estimated \$336.3 million understatement of the \$89 billion of inventory used to prepare the FY 1996 DBOF Financial Statements. That net amount of error made the value of DBOF inventory on the financial statements appear accurate because the overstated amounts offset most of the understated amounts. The net estimated value was within 1 percent of the dollar value for DBOF inventory reported on the financial statements. However, offsetting the overages and underages provides a false sense that the inventory is accurate. Although the net value reported on the statements is within an acceptable range, the \$3.9 billion of misstatements and 15.8 percent error rate are unacceptable and require management attention. A commercial vendor with \$3.9 billion in errors in inventory would be seriously concerned and would initiate corrective action. Further, as DoD reduces inventory on hand due to streamlining initiatives, errors in inventory records become more critical to ensuring supply availability to the military.

Reasons for Inaccurate Inventory

The inaccurate inventory records occurred because the storage activities' inventory records were not reconciled with the inventory records maintained by the DLA ICPs. Inaccurate inventory records also occurred as a result of errors in processing inventory transactions.

Reconciling Inventory Records. Inventory records were inaccurate because the records maintained by the DLA distribution depots and Military Department depots were not reconciled with the inventory records maintained by the DLA ICPs. The inventory records were not accurate before or after the physical inventories were performed. As a result, the DLA ICPs used erroneous inventory records to accumulate the value of inventory for the financial statements.

The DLA had inventory valued at about \$8.5 billion stored at the 23 DLA distribution depots and \$357 million stored at Military Department depots and other storage sites. We estimate that \$1.1 billion of the \$3.9 billion misstatement of on-hand inventory was caused by not reconciling the records.

Procedures for Reconciling Inventory Records. DoD recognized the problems involved in maintaining separate inventory records at the depots and ICPs. DoD 4000.25-2-M) "Military Standard Reporting and Accounting Procedures, " May 1987, requires each DoD Component to implement a location audit program that includes procedures for location reconciliation. Location reconciliation requires matching the storage activities' records and the ICP records in order to identify and correct quantity discrepancies and data. The regulation also requires that discrepancies between the Storage Activity and ICP records be researched and special inventories be conducted when corrective action is needed.

Evaluation of Reconciliation Program. Although implementing the location reconciliation program is critical to the accuracy of the DLA inventory records, DLA did not have an effective reconciliation program. DLA was implementing the Distribution Standard System at the DLA distribution depots to replace existing legacy systems. DLA included the capability to reconcile the distribution depots and ICP inventory records in the Distribution Standard System. The Distribution Standard System implementation plan provided for installing the system at former Army depots during FY 1996 and to complete implementation at all depots during FY 1997. However, at the time of the audit, the implementation schedule had been delayed, and complete implementation was not expected until FY 1998. In November 1995, DLA began limited quarterly reconciliations between the DLA distribution depots that had implemented the Distribution Standard System and the DLA ICPs. However, in April 1996, DLA suspended the location reconciliation program

because of deficiencies in the automated reconciliation program between the Distribution Standard System and the Standard Automated Material Management System. The deficiencies distorted the ICPs' operating results.

Errors in Processing Inventory Transactions. Inventory records were also inaccurate because inventory transactions were not processed or were processed incorrectly. We attributed the remaining misstatement of on-hand inventory, an estimated \$2.8 billion of the \$3.9 billion of errors in the inventory records, to various errors in processing inventory transactions. In separate audit reports, the IG, DoD, and the Military Department audit organizations reported that the inaccurate perpetual inventory records at DLA distribution depots and retail storage activities occurred as a result of various errors in processing inventory transactions. Specific processing problems included:

- o unposted receipts,
- o erroneous gains or losses processed,
- o incomplete disposal actions,
- o unrecorded rewarehousing actions,
- o data entry errors,
- o duplicate document postings,
- o erroneous reversals of inventory adjustments, and
- 0 incorrect unit of issue.

See Appendix B for a summary of the FY 1996 reports issued by the Inspector General (IG), DoD, and the Military Department audit organizations.

To eliminate repetitive errors in inventory transaction errors, DoD 4000.25-2-M requires causative research to identify, analyze, and evaluate the cause of inventory discrepancies.

The prior audit, "Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots," Report No. 98-O 19, November 10, 1997, concludes that the research effectively determined the correct inventory record balance. However, the distribution depots did not identify the underlying causes for the inaccurate inventory records. The report concludes that although causative research has been repeatedly reported in prior audits over the last 15 years, ineffective research procedures still exist. The report recommended that the Director, DLA, revise the depots' causative research procedures to use

Finding A. Inventory Record Accuracy

computer-assisted techniques and analysis to focus research efforts on depots and commodities with large variances. Therefore, we are making no additional recommendations to address inventory transaction processing.

Summary

The quarterly reconciliation between the DLA distribution depots and the DLA ICPs is crucial to maintaining accurate inventory records, and DLA needs to devote the resources needed to correct the deficiencies in the automated reconciliation program. Expeditionary actions are necessary to maintain effective logistics support and provide accurate financial data.

Management Comments on the Finding and Audit Response

Management Comments. The Deputy Director, DLA, partially concurred with the finding. He stated that the finding reported that the inaccurate records greatly limited the reliability of the financial data, but also that the value reported on the statements is within an acceptable range. The Deputy Director stated that using a method in which any deviation between the bin quantity and the record quantity is an error (zero tolerance) fails to consider the magnitude of the error. While DBOF inventory records were only 84.2 percent accurate, the magnitude of those errors was within an acceptable range, since the dollar accuracy of inventory records was 95.7 percent. The logistics community has moderated its requirements by allowing acceptable tolerances to account for the impact of errors on readiness and financial management. Although 100 percent accuracy is ideal, some items do not warrant the expenditures necessary to achieve and maintain record accuracy at 100 percent.

Audit Response. We can only partially agree with the Deputy Director comments. The audit community does not require 100 percent record accuracy. However, to measure the reasonableness of the reported inventory value, we must measure the total record inaccuracies at the NSN level. Zero tolerance at the NSN level is necessary to have a meaningful and consistent measure for financial audits, and is not the same as zero tolerance for the entire inventory. As stated earlier, we reported a net misstatement of \$336.3 million (with a range of negative \$417.3 million to \$1,090 million). Although the net misstatement was within an acceptable range, this occurred largely because some errors in the Military Departments and DLA canceled out other errors.

The realignment of DBOF as separate Working Capital Funds will either positively or negatively effect this apparent accuracy. We also reported that the gross misstatement of \$3.9 billion (with a range of \$2.8 to \$4.9 billion) limited the reliability of the financial data. The gross dollar misstatement of about 4.3 percent indicated that material management control deficiencies existed. Although the 4.3 percent dollar value of error may be acceptable to the logistics community, the \$2.8 billion to \$4.9 billion of errors is not acceptable for financial reporting.

Recommendations, Management Comments, and Audit Response

A. We recommend that the Director, Defense Logistics Agency:

1. Expedite actions to correct the automated location reconciliation program to provide periodic reconciliations of the inventory records maintained by the Defense Logistics Agency inventory control points with the records maintained by Defense Logistics Agency distribution depots, Military Department depots, and other storage locations.

Management Comments. The Deputy Director indicated that all required changes have been made and the location reconciliation process has been in operation since July 1997 at the DLA ICPs and distribution depots that use the Distribution Standard System. As the Distribution Standard System is implemented in the former Military Department depots, location reconciliations will be scheduled as early as possible. The Distribution Standard System can reconcile the depots' records with Military Department ICP systems that can process the location reconciliation transactions.

2. Establish a schedule for implementing the location reconciliations and for evaluating the causes of significant discrepancies found during the reconciliations.

Management Comments. The Deputy Director provided a schedule for reconciling DLA ICP and distribution depot records and stated that procedures for researching and evaluating discrepancies have been provided to the ICPs. The schedule and procedural guidance will be published in the next revision of Defense Logistics Agency Manual 4140.2, Volume II.

Finding B. Annual Statistical Sample

ICPs and retail supply activities did not implement a plan to conduct an annual statistical sample of the FY 1996 DBOF inventory, as required by DoD 4140.1-R, the "DoD Material Management Regulation," January 1993. This condition existed because the Deputy Under Secretary of Defense (Logistics) and the Under Secretary of Defense (Comptroller) did not cooperatively develop a framework for the annual statistical sample. Also, the Deputy Under Secretary of Defense (Logistics):

- o did not require compliance with its regulation,
- o did not appoint a central management official for developing and conducting the annual statistical sample of inventory, and
- o had not required that information be compiled to form the basis for sample selection and inventory testing.

As a result, the Under Secretary of Defense (Comptroller) did not have a sound basis for his assertions that inventory reported in the DBOF financial statements was accurate and complete.

Inventory Policy

DoD 4140.1-R makes the ICPs and retail supply activities responsible for taking physical inventories and ensuring that the quantities on hand agree with perpetual inventory records.

DoD 4140.1-R also directs ICPs and retail supply activities to perform an annual statistical sample of the perpetual inventory records. The annual statistical sample has the highest priority for scheduling inventories. The purpose of the sample is to provide DoD management with an assessment of the accuracy and completeness of the perpetual inventory records supporting management's assertions about inventory on the financial statements.

DoD 4000.25-2-M, as amended by the "Approved Military Standard Transaction Reporting and Accounting Procedures Change Letter Number 8A," August 9, 1996, provides guidance for separately assessing the accuracy of inventory records for the wholesale logistics community.

DoD 4000.25-2-M recognizes the nature of inventory inaccuracies and the cost of conducting inventories. It requires that physical inventories be more

selective than 100-percent, wall-to-wall, total item counts. Accordingly, the distribution depots are required to take statistical samples to assess the overall accuracy of their inventory records.

DoD 4000.25-2-M authorizes the ICPs to take statistical samples to assess the overall accuracy of their inventory records. It also provides guidance for DoD Components to report the overall results of their scheduled and unscheduled inventory programs in their Inventory Control Effectiveness Reports. However, those reports are not based on the sample inventories discussed above, and may not indicate the overall condition of the inventory records.

Evaluation of the Inventory Program

In his report to Congress, "Security and Control of Supplies for FY 1994," the Deputy Under Secretary of Defense (Logistics) reported that working cooperatively, the IG, DoD; the Office of the Secretary of Defense; the Military Department audit organizations; and the DLA Operations Research Office used a multistage stratified statistical sampling technique to meet the requirements of the CFO Act for validating DBOF inventory and the logistics community's needs for assessing the accuracy of inventory records. The report stated that in FY 1995, the DoD would expand the sampling plan to capture more fully the characteristics of the population necessary to evaluate the accuracy of logistics records. However, little progress has been made in developing and implementing a valid sampling program since that time.

The Deputy Under Secretary of Defense (Logistics) had not developed a plan for performing the annual statistical sample of the DBOF inventory in FY 1996. No action had been taken to accumulate universe data for developing an inventory sample, and no action officer had been placed in charge of such a sample. In addition, the DLA distribution depots did not take comprehensive statistical samples to assess the accuracy of logistics records during FY 1996.

To demonstrate that an overall sample of DBOF inventory could be taken, and in the absence of action at the Deputy Under Secretary of Defense (Logistics) level, we developed a sampling plan and conducted the sample. Using resources from the IG, DoD; the Army, Navy, and Air Force audit organizations; the DLA Operations Research Office; and the retail inventory storage activities, we gathered universe data, developed a sampling plan, developed a timetable for completing the sample, and executed the sampling plan by the end of FY 1996.

Status of the Annual Statistical Sample

Since the CFO Act's requirements for inventory dollar accuracy have been in place, the DoD financial and logistics communities have been unsure about designing and implementing a proper, valid, and adequately precise statistical sampling plan. As a result, the financial and logistics communities, including the DLA, have not developed the framework for a sampling plan to satisfy the CFO Act's requirements for assessing the accuracy of inventory records from the perspective of inventory value.

To satisfy the requirements of both the financial and logistics communities, DoD needs a statistically designed sample with known probabilities of selection that emphasizes both dollar value and quantitative accuracy using a stratified sampling technique. The annual statistical sample can be designed to meet that need. In addition, the annual statistical sample can provide the logistics community with a quantitative performance measure and can more accurately assess the accuracy of the inventory records.

In a previous cooperative effort by the Office of the Deputy Under Secretary of Defense (Logistics), the Defense Logistics Management Standards Office, and the IG, DoD, Quantitative Methods Division, an adequate sample had been conceived and partially developed. This cooperative effort proposed performing a single sample to evaluate DBOF inventory record accuracy from the perspective of inventory value. The DLA Operations Research Office had accumulated records from the Military Department depots and DLA distribution depots to select a sample of wholesale inventory. However, the effort stalled primarily because the logistics community had difficulty identifying and accumulating a universe of the total DBOF inventory population, including retail inventories, and because the audit community did not take comprehensive samples of DBOF inventory in FY 1995.

CFO Sample Requirements

DoD wholesale inventories are managed by the 16 ICPs and stored primarily at the DLA distribution depots and Military Department depots. DoD established centralized guidance for the management of DoD wholesale inventory in DoD 4140.1-R and DoD 4000.25-2-M.

Consolidating the management of the wholesale distribution depots in DLA should permit the use of standardized inventory control procedures that minimize the obstacles to scheduling and implementing an annual statistical sample of wholesale inventory.

DoD retail inventories are stored at over 500 military installations worldwide. The Military Departments developed inventory systems and inventory control programs to manage their retail inventories. DoD 4140.1-R directs that procedures for management of inventories below the wholesale level (retail inventory) shall be patterned after wholesale procedures as much as possible.

Statistical Sample Developed for Audit

The multistage stratified sampling structure used for this audit was designed specifically to meet the requirements of the CFO Act. However, it can also be adapted to test inventory accuracy. The efficiency of the sampling design was improved by incorporating information learned while conducting a previous sample. Feedback and revision are integral parts of a long-term sampling plan. Without them, neither the efficiency nor the continuing relevance of the sampling results is assured.

As part of our sampling design, we observed physical inventories throughout the year. In addition, we performed repeated sampling at different times for specified locations. Statistical tests showed no significant differences in overall net results between the first and successive sampling at the specified locations (see Appendix A for details). These findings support the use of sample data collected throughout the year for year-end conclusions on the financial statements for the inventory line item. However, the data contain some indicators of differences over time at individual sites. More testing is needed to determine when repeated sampling is appropriate for purposes other than meeting the requirements of the CFO Act.

Conclusion

Although the Deputy Under Secretary of Defense (Logistics) reported to Congress that a valid sample and test of the DBOF inventory would be completed, management has not taken the necessary steps. The Deputy Under Secretary of Defense (Logistics) and Under Secretary of Defense (Comptroller) need to define the requirements for sampling plans to meet the requirements of the CFO Act.

In December 1996, the Under Secretary of Defense (Comptroller) announced that the DBOF would be realigned into separate Working Capital Funds. This decision significantly changes the requirements for the annual statistical sample and will affect the development and implementation of the sample. To satisfy

Finding B. Annual Statistical Sample

the requirements of the CFO Act, the sampling plan must be designed to support separate audit opinions for each of the separate Working Capital Funds. This will require a significantly larger sample than the sample we developed for FY 1996. In addition, the sampling plan must be designed to evaluate the accuracy of both the wholesale and retail inventory segments. This will require a more complex sample design and may also increase sample sizes.

Separate samples of inventory stored at the DLA distribution depots and inventory stored at Military Department depots and retail storage activities would be the most efficient and effective means of meeting the CFO Act requirements. The DLA distribution depots are a unified organization for which a single sampling plan can meet both CFO Act and logistics requirements. Accordingly, we believe that the Deputy Under Secretary of Defense (Logistics) should oversee the design of a sampling plan for the DLA distribution depots.

The Military Department depots and retail storage activities are managed by the Military Departments and are located worldwide. To effectively control the execution of the retail inventory sample, we believe that the Deputy Under Secretary of Defense (Logistics), in coordination with the Under Secretary of Defense (Comptroller), should centrally manage the design and implementation of the sampling plans.

Based on our sample results, we believe that separate sampling plans should be developed for the distribution depot and retail segments of inventory. The error rates for DLA distribution depots were substantially higher than the error rates for Military Department depots and retail storage activities. Based on the statistical sample discussed in Appendix A, we estimated error rates of 20.1 percent for DLA distribution depots and 10.5 percent for Military Department depots and retail storage activities. We attributed the more accurate inventory records at Military Department depots and retail storage activities to smaller quantities of inventory and faster turnover. In addition, the smaller size of the retail inventory operation allowed the retail storage activities to perform wall-to-wall inventories and more frequent location reconciliations. Separate samples of materiel stored in DLA distribution depots and materiel stored by Military Department depots and retail storage activities would allow management to effectively track improvements in inventory management and controls over the wholesale and retail inventory segments.

The success of our sampling plan demonstrated that such samples are achievable, provide a basis for assessing the overall accuracy of DoD inventories, and should be used on an ongoing basis by DoD. The IG, DoD, Quantitative Methods Division can assist in designing the appropriate sampling plans. The results of the sample are included in Appendix A.

Recommendations, Management Comments, and Audit Response

B. We recommend that the Deputy Under Secretary of Defense (Logistics), in coordination with the Under Secretary of Defense (Comptroller):

- 1. Establish the framework for the annual statistical samples of wholesale and retail inventory records.**
- 2. Assign a central management official to oversee the development of the samples.**
- 3. Direct the Military Departments and the Defense Logistics Agency to perform the sample.**

Management Comments. The Acting Deputy Under Secretary of Defense (Logistics) generally concurred with Recommendations B. 1. and B.3. and identified corrective actions that would be taken. He nonconcurred with Recommendation B.2., stating that each Military Department and DLA will be responsible for establishing the sampling methodology and developing samples to assess the accuracy of wholesale and retail inventory records.

Audit Response. The proposed alternative action for Recommendation B.2. is acceptable. The Acting Deputy Under Secretary of Defense (Logistics) did not give completion dates for implementing the corrective actions. Therefore, we request that completion dates for implementing corrective actions be provided in response to the final report.

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Part II - Additional Information

Appendix A. Audit Process

Scope

The overall objective of the DBOF inventory audit was to determine whether Inventory, Net, reported at \$57.1 billion on the FY 1996 DBOF Consolidated Financial Statements, was presented fairly in accordance with the other comprehensive basis of accounting described in the Office of Management and Budget Bulletin No. 94-01, "Form and Content of Agency Financial Statements," November 16, 1993.

We limited the audit to evaluating the accuracy of the perpetual inventory records for on-hand inventory maintained by the DoD ICPs and retail storage activities. The audit was limited because the sample for DBOF inventory record accuracy, which we conducted because DoD management had not executed such a plan (see Finding B), prohibited us from testing consigned and in-use inventory (\$4.7 billion); in-transit inventory (\$9.6 billion); adjustments, such as inventory revaluation to latest acquisition cost (\$21.7 billion); the allowance for inventory holding gains and losses (\$21.2 billion); and other aspects of inventory that are required to fully audit the inventory amounts reported in the DBOF financial statements. The DBOF perpetual inventory records provided information on the quantity of each item in DBOF inventory that the Military Departments and DLA used to extrapolate the value of on-hand inventory.

Methodology

Use of Computer-Processed Data. To achieve the audit objective, we relied on computer-processed data in the inventory records of the Military Department and DLA ICPs. Our audit tests included statistical sampling of the inventory records to assess their accuracy and judgmental sampling of the storage activity's location records to assess their completeness (see Appendix C). The results of the audit tests showed an estimated error rate of 15.8 percent. We concluded that the data were inaccurate. Although the overstatements and understatements were essentially offsetting, the inaccurate records limited the reliability of the data reported in the DBOF financial statements.

Audit Universe. The Military Departments and DLA maintained automated logistical inventory records. Those inventory records were reconciled with the

activities' financial inventory accounting records at the end of the fiscal year. The financial inventory accounting records were then extrapolated to establish the value of on-hand inventory reported in the trial balances for DBOF. We obtained DBOF trial balance information as of approximately the end of FY 1994 to establish the sampling frame and select 31 primary sampling units (discussed below). The data showed that the 546 DBOF activities had on-hand inventory totaling \$92.8 billion, valued at standard price. Similarly, we obtained DBOF trial balance information as of September 30, 1996, which showed on-hand inventory valued at \$89 billion.

For the 31 primary sample units, we obtained logistical inventory records between June and September 1995. The ICPs and retail supply activities extracted information from the logistical inventory records and provided us with computer tapes identifying inventory balances and values. We used the logistical inventory records to select secondary sampling units (NSNs at specific locations) for review, as discussed below. The data showed that the 31 primary sampling units (storage activities) held inventory valued at \$62.2 billion.

Use of Technical Assistance. The IG, DoD, Quantitative Methods Division assisted in designing and evaluating of the statistical sampling plan.

Audit Type, Dates, and Standards. We performed this financial-related audit of perpetual inventory records during the period July 1995 through September 1997 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the IG, DoD, and Office of Management and Budget Bulletin No. 93-06, "Audit Requirements for Federal Financial Statements," January 8, 1993. Those standards require that we plan and perform the audit to obtain reasonable assurance that the financial information presented in the consolidated statements is free of material misstatements.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Statistical Sampling Methodology

Purposes of Sampling. The purposes of the statistical sample in this CFO audit were to provide quantitative evidence for two audit determinations:

- o the accuracy of the inventory value reported in the DBOF trial balances for FY 1996, and
- o the adequacy of internal controls over the inventory during FY 1996.

To determine the accuracy of the inventory value, we estimated statistically the total net dollar misstatement of the inventory trial balance. To assess the adequacy of internal controls, we estimated statistically the overall rate of misstatement and the total gross dollar misstatement of this balance. We also estimated statistically the separate misstatement rates for the trial balances of two subpopulations: the DLA distribution depots, and all other sites including both Military Department depots and retail storage activities. Finally, we estimated statistically the total gross dollar misstatement due to not reconciling inventory records of the depots with records of the DLA ICPs. Our sample also included repeated counts of the same NSNs at different times for specified locations. This repeated sampling allowed us to test the validity of using inventory data collected throughout the year to support year-end conclusions.

Sampling Frame. The original frame for our statistical sampling included 546 locations with a total reported on-hand inventory trial balance valued at \$92.8 billion as of September 1994. The 23 DLA Distribution Depots had a reported inventory trial balance of \$68.1 billion. The remaining locations, with a reported trial balance of \$24.7 billion, were Military Department depots and retail storage activities. As of September 30, 1996, the trial balance was \$89 billion. Subsequently, we eliminated 10 locations from the frame for the following reasons: for 5 locations, inventory was being eliminated as a result of DoD downsizing; for 3 locations, inventory stored at many locations was of inconsequential value; for 1 location, the inventory was not in condition for audit; and for 1 location, a dry-docked ship, the supply department was not operating at the time of audit. After these adjustments, the final frame for our sampling included 536 locations with a total reported trial balance of \$89.3 billion for on-hand inventory.

Sampling Design. We used a two-stage sampling design for this audit. At the first stage of sampling, we defined primary sampling units as DLA distribution depots, Military Department depots, and retail storage activities. We selected 69 of these primary sampling units using probability proportional to size weights with replacement sampling. The measure of size was the reported dollar value of inventory at the primary sampling units based on the September 1994 trial balance. Because the with-replacement sampling methodology allows a primary sampling unit to be selected more than once, our 69 samples encompassed only 31 unique locations.

At the second stage of our sampling, we defined secondary sampling units as all NSNs specific to a primary sampling unit location. For each unique primary sampling unit location selected in our first stage of sampling, we designed a stratified sample of secondary sampling units. These stratifications encompass both quantitative and qualitative dimensions in order to ensure the stability of individual primary sampling unit results. In all, we observed 2,878 physical inventories of location-specific NSNs in our sample.

Sample Results

We derived the following statistical estimates of dollar value misstatements from our sample data:

	<u>90-Percent Confidence Intervals</u>		
	<u>Lower Bound</u>	<u>Point Estimate (millions)</u>	<u>Upper Bound</u>
Total net misstatement*	\$ (417.3)	\$ 336.3	\$1,090.0
Total gross misstatement	\$2,794.5	\$3857.9	\$4,921.3
Total gross misstatement caused by not reconciling depot and DLA ICP records	\$ 382.3	\$1,086.1	\$1,790.0

*Positive net misstatements are understatements; negatives are overstatements.

We are 90-percent confident that the total net dollar misstatement of the NSNs at the locations in our sampling frame is from \$417.3 million overstated to \$1,090 million understated. Also, we are 90-percent confident that the total gross dollar misstatement of the NSNs at the locations in our sampling frame is from \$2,794.5 million to \$4,921.3 million. Of the total gross dollar misstatement, we are 90-percent confident that from \$382.3 million to \$1,790 million is due to not reconciling depot and DLA ICP inventory records. The point estimates of these dollar value misstatements are the statistically best unbiased single-value estimators of the true dollar misstatements for their respective definitions.

Appendix A. Audit Process

We also generated the following statistical estimates of misstatement percentage from our sample data:

	<u>90-Percent Confidence Intervals</u>		
	<u>Lower Bound Percent</u>	<u>Point Estimate Percent</u>	<u>Upper Bound Percent</u>
Overall misstatement percentage	12.0	15.8	19.5
Misstatement percentage at DLA distribution depots	14.1	20.1	26.1
Misstatement percentage at Military Department depots and retail storage activities	6.8	10.5	14.3

We are **90** percent confident that from 12 to 19.5 percent of the NSNs at the locations in our sampling frame are misstated. For the DLA distribution depots in our frame, we are 90 percent confident that from 14.1 to 26.1 percent of the NSNs are misstated. For the Military Department depots and retail storage activities in our sampling frame, we are 90 percent confident that from 6.8 to 14.3 percent of the NSNs at the locations in our sampling frame are misstated. These point estimates of misstatement percentage are the statistically best unbiased single-value estimators of the true misstatement percentage for the respective inventory segments.

Our use of with replacement sampling of primary sampling unit locations not only substantially improved the precision of our statistical estimates, but also allowed us to observe repeated inventories of a subset of location-specific NSNs at different times during the year. With these repeated measures, we were able to assess the validity of using inventory observations collected throughout the year in support of audit conclusions concerning year-end financial statement values. We performed statistical tests of the differences in both counts and net dollars from the preceding to the succeeding samples for this subset of NSNs. Neither the count difference nor the net dollar difference is significantly different from zero at the 90-percent confidence level for the locations where we made repeated observations. This result supports the use of inventory data collected during the year to support DoD-wide year-end audit conclusions. However, there are indications within the repeated observations that cycles or trends may exist at specific locations. These effects appear to cancel out at the aggregate (DOD-wide) level, but could lead to distortions in location-specific or Military Department-specific statistical estimates. More research is needed to validate the use of inventory data collected over time in support of estimates for particular locations or Military Departments.

Management Control Program

DoD Directive 5010.38, "Internal Management Control Program," April 14, 1987, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of Management Control Program. We reviewed the management control procedures specified in DoD 4000.25-2-M regarding the reconciliation of perpetual inventory records of depots and ICPs and the conduct of sampling programs to assess the accuracy of on-hand inventory reported in the DBOF financial statements. We also reviewed self-evaluations of those controls that the Deputy Under Secretary of Defense (Logistics) and DLA evaluated in 1996.

Adequacy of Management Controls. We identified material management control weaknesses, as defined by DoD Directive 5010.38, related to the reconciliation of depot and ICP inventory records and to the conduct of the annual statistical sample for CFO reporting purposes. All recommendations, if implemented, will correct the material weaknesses. A copy of the final audit report will be provided to the senior officials in charge of management controls in the Office of the Secretary of Defense and DLA.

Adequacy of Management's Self-Evaluations. DoD has recognized inventory control as a high-risk area. The Military Departments and DLA identified supply operations as an assessable unit and correctly identified inventory record accuracy as a high-risk area. The Deputy Under Secretary of Defense (Logistics) and DLA conducted the required self-evaluations, but did not specifically report in their FY 1996 annual statements of assurance the inadequacies of management controls over the reconciliation of depot and ICP inventory records, or the failure to implement the annual statistical sample. Management could not explain why these material weaknesses were not identified and reported.

Appendix B. Summary of Prior Coverage

Since the DBOF was established in 1991, the General Accounting Office, the IG, DoD, and the Military Department audit organizations have published audit reports that discuss issues related to DBOF Inventory.

General Accounting Office

GAO Report No. HR-97-5, "Defense Inventory Management," February 1997. This report states that DoD has made some progress in addressing inventory management problems identified in prior audit reports, but has not achieved the expected benefits of DBOF and other DoD initiatives. Large amounts of excess inventory still exist, oversight remains inadequate, and financial reports are unreliable. The report concludes that the problems will take some time to correct and DoD inventory management therefore remains a high-risk area. However, in the short term, DoD needs to improve the efficiency of existing inventory systems by focusing on record accuracy. The report made no recommendations.

Inspector General, DoD

This is the fourth in a series of reports resulting from our audit of inventory accounts in the FY 1996 financial statements of the DBOF.

IG, DoD, Report No. 97-102, "Inventory Accuracy at the Defense Depot, Columbus, Ohio," February 28, 1997. This report states that the Defense Depot, Columbus, Ohio, did not include 696,380 chemical suits valued at \$51 million in its inventory records. Additionally, the depot records were misstated by 1.04 million chemical suits, valued at \$71 million. The report recommended that DLA research the causes of discrepancies, use a redistribution order to process materiel from remote locations, mark storage locations in the warehouses, and use the proper procedures for issuing stock. DLA generally agreed with the recommendations and stated that actions to correct the problems would be completed by September 30, 1997.

IG, DoD, Report No. 97-159, "Inventory Accuracy at the Defense Depot, Susquehanna, Pennsylvania," June 12, 1997. This report states that custodial records of the Defense Depot, Susquehanna, Pennsylvania, did not reflect

correct inventory balances for 1,969 consumable items for which management responsibility had been transferred from the Navy to DLA under the consumable item transfer program. Consequently, the DLA financial statements were misstated by \$16 million. The depot also retained \$1 million in obsolete inventory and did not assign storage locations to materiel located in a warehouse shared with the Navy ICP. The report recommended that DLA identify and dispose of obsolete items, perform a wall-to-wall inventory of items in the warehouse shared with the Navy ICP, and assign storage locations to materiel stored there. The DLA agreed with the recommendations and stated that action would be completed by July 31, 1997.

IG, DoD, Report No. 98-019, "Inventory Record Accuracy and Management Controls at the Defense Logistics Agency Distribution Depots," November 10, 1997. This report states that inventory record accuracy and management controls were not adequate. Although DLA developed a plan to assess the overall accuracy of its distribution depot records for logistical purposes, the plan failed to meet the CFO Act requirements to assess the dollar value accuracy of the records. Also, DLA did not have the necessary controls to ensure that all scheduled inventories were completed, that data transferred from legacy systems to the Distribution Standard System were accurate, and that standard distribution operating procedures were established. In addition, the Deputy Under Secretary of Defense (Logistics) did not establish a standard against which DLA could measure inventory record accuracy at its distribution depots. As a result, DLA could not accurately measure inventory accuracy, and distribution depot controls could not be relied on to provide complete and accurate inventory data. Distribution depot procedures to research the causes of inventory discrepancies, although effective in correcting the record balance of the items counted, did not identify the underlying causes of the record discrepancies. In addition, some depots did not perform the required causative research. As a result, causative research was of little benefit to distribution operations.

We recommended that the Deputy Under Secretary of Defense (Logistics) establish a standard for measuring inventory record accuracy, and that DLA establish a tracking process to ensure that all inventories are conducted as planned, ensure the accuracy of data transferred from legacy systems to the Distribution Standard System, implement standard operating procedures at all depots, and train depot personnel to use the Distribution Standard System. We also recommended that DLA revise causative research procedures to use computer-assisted techniques that focus research efforts on depots and commodities with large variances. The Deputy Under Secretary of Defense (Logistics) concurred with our recommendation, stating that the Joint Physical Inventory Work Group will be tasked to develop an inventory accuracy standard by October 31, 1997.

The Deputy Director, Defense Logistics Agency, concurred with all recommendations except one, agreeing to establish a tracking system to ensure that all inventories are conducted as planned, to ensure the accuracy of data transferred from legacy systems to the Distribution Standard System, to implement standard operating procedures at all depots, and to train depot personnel to use the Distribution Standard System. The Deputy Director partially concurred with the recommendation to revise procedures for researching inventory discrepancies, stating that analysis at the NSN and storage locator levels would be more useful than focusing research efforts on depots and commodities with large variances.

IG, DoD, Report No. 95-267, "Defense Business Operations Fund Consolidated Statement of Financial Position for FY 1994," June 30, 1995. The IG, DoD, was unable to express an opinion on the DBOF FY 1994 Consolidated Statement of Financial Position because significant internal control deficiencies existed and significant instances of noncompliance with regulations were found. Inventory was identified as one of the account balances with material internal control weaknesses, which prevented the IG, DoD, from rendering an opinion. No recommendations were made in this report.

IG, DoD, Report No. 95-195, "Statement of Financial Position for the Defense Logistics Agency Supply Management Business Area of the Defense Business Operations Fund as of September 30, 1994," May 17, 1995. The IG, DoD, was unable to render an opinion on the Statement of Financial Position. The report concludes that the DLA Supply Management Business Area made significant improvements in the valuation, reporting, and disclosure of inventory; however, further improvements were needed in the internal control structure over transaction processing and follow-up procedures. DLA management did not properly perform physical inventory procedures and related reconciliations. Physical inventory counts were not always reported to supply centers; were reported with different quantities from the observed counts and reconciliations; and were canceled without being reported and posted to the accountable records. In addition, physical inventory results were not posted or were posted in error to the financial and distribution subsystems because the reconciliation process and depot inventory systems were not functioning properly. No recommendations were made in this report.

IG, DoD, Report No. 94-161, "Consolidated Statement of Financial Position of the Defense Business Operations Fund for FY 1993," June 30, 1994. The IG, DoD, was unable to express an opinion on the DBOF FY 1993 Consolidated Statement of Financial Position because significant internal control deficiencies existed and significant instances of noncompliance with regulations were found. The Inventory Held for Sale, Net account and the Inventory Not Held for Sale account had a number of internal control problems. In addition to valuation and classification problems, many activities had material discrepancies in these accounts. Specifically, for the Inventory Not Held for Sale account,

negative inventory balances were reported, and the accuracy of War Reserve assets could not be verified. Also, DLA had not effectively implemented an internal management control program for reporting the results of physical inventories. No recommendations were made in this report.

Army Audit Agency

Army Audit Agency, Audit Report No. AA 97-86, "FY 96 Army Defense Business Operations Fund Financial Statements: Supply Management Inventories," December 31, 1996. This report summarizes the work that the Army Audit Agency performed on the Army portion of the FY 1996 DBOF. That work included a review of 234 items valued at \$1.7 billion at 4 DLA distribution depots. The report concludes that about 25 percent of the depot records had discrepancies. The report also concludes that the causative research conducted by the depots frequently did not identify the root causes for the inventory adjustments, and that scheduled inventories were not conducted as required by DoD policies. The report made no recommendations.

Army Audit Agency Audit Report No. 94-470, "Army Defense Business Operations Fund FY 1993 Financial Statements," June 30, 1994. The Army Audit Agency disclaimed an opinion on Inventory Held for Sale and Inventory Not Held for Sale. The Army Audit Agency could not verify the accuracy of the inventory balance because the database of inventory items used to select a sample of items for physical inventory included items that were not part of the DBOF. Of the 438 items inventoried, 225 items (51 percent) had inaccurate balances in terms of quantity or condition. In addition, the Army Audit Agency could not ensure the accuracy of War Reserve assets, and other audits conducted during FY 1993 identified accountability problems with War Reserve assets. No recommendations were made in the report.

Naval Audit Service

Naval Audit Service Report No. 040-97, "Fiscal Year 1996 Consolidating Financial Statements of the Department of the Navy Defense Business Operations Fund," June 1997. This report summarizes the audit work done by the Naval Audit Service on the Navy portion of the DBOF financial statements. As part of its review, the Naval Audit Service compared physical inventories and supply records for 488 items Navy-owned items and found that inventory records for 106 items or 21.7 percent of the inventory contained discrepancies. The Naval Audit Service attributed most of the discrepancies to

Appendix B. Summary of Prior Coverage

human errors in processing receipt and issue transactions. Personnel at the ICPs and storage activities corrected the record balances and initiated research into the causes of the discrepancies. The report made no recommendations pertaining to inventory accuracy and controls.

Naval Audit Service Report No. 044-95, "Fiscal Year 1994 Consolidating Financial Statements of the Department of the Navy Defense Business Operations Fund," May 30, 1995. This report concludes that the inventory records for Inventory, Net at wholesale Navy stock points were not accurate. Of 583 sampled items, the quantities of items on hand differed from the supply records for 217 (37.2 percent). The Naval Audit Service estimated that the financial records were understated by \$15.2 million. The report identified numerous problems in inventory transaction processing that resulted in the inaccurate inventory records. The report recommended that stock points aggressively review and correct systemic causes for inventory discrepancies and that the Naval Supply Systems Command review pending procurement actions. Management concurred and began corrective actions.

Air Force Audit Agency

Air Force Audit Agency Report No. 96068012, "Inventory Accounts, Supply Management Activity Group, Fiscal Year 1996. This report states that internal controls over wholesale and retail inventory were adequate to properly document inventory adjustments that reconciled inventory physical counts with accountable records and to safeguard inventory in storage. Also, the physical inventory counts materially agreed with the balances recorded in accountable records. However, the DLA inventory managers did not correct the causes for wholesale inventory variances or sufficiently research variances to identify all causes. The report made no recommendations.

Air Force Audit Agency Report No. 93068016, "Financial Reporting of Fiscal Year 1993 Inventories Within the Supply Management Business Area," August 26, 1994. This report concludes that personnel of the Air Force Supply Management Business Area did not accurately support year-end account balances, and internal controls were not effective over Air Force Materiel Command assets with contractors, physical inventories, and the computation of Inventory Not Held for Sale balances. The statistical sample had 508 line items and found 224 (44 percent) line items in error. The overall condition of the accounting records prevented the Air Force Audit Agency from determining the accuracy of inventory account balances reported on the financial statements of the Air Force Supply Management Business Area as of September 30, 1993. The report recommended actions to improve the accountability for inventory with contractors, to modify the automated warehousing system to improve

Appendix B. Summary of Prior Coverage

accountability for on-hand inventory, and to evaluate methods used to value and report inventories of War Reserve Materiel. Management officials generally agreed with the overall audit results and concurred with the recommendations.

Appendix C. Accuracy of On-Hand Stock Records

In addition to observing the physical inventories, we performed limited testing to determine whether DBOF inventory records were complete. We judgmentally sampled inventory storage locations to evaluate the accuracy of the storage activities' locator records. Those audit tests indicated that the inventory records for on-hand stock maintained by the DLA distribution depots, Military Department depots, and retail storage activities were substantially complete.

We identified the materiel stored in 2,119 storage locations that were adjacent to storage locations visited during the inventory observations. We compared the items identified at those 2,119 locations with the information in the perpetual inventory records to determine whether the items were included in the records of the storage activities.

Of the 2,119 items reviewed, 2,078 items (98.1 percent) were recorded the storage activities' inventory records. The observed location accuracy rate exceeded the DoD standard of 97 percent. For the 41 items that were not recorded in inventory records, the storage activities adjusted their records, resulting in an inventory gain of \$1.1 million.

Appendix D. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Director, Accounting Policy
Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Public Affairs)
Under Secretary of Defense for Acquisition and Technology
Deputy Under Secretary of Defense (Logistics)
Director, Defense Logistics Studies Information Exchange

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Finance and Accounting Service

Other Defense Organizations (cont'd)

Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Non-Defense Organizations

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
General Accounting Office

Chairman and ranking minority member of each of the following congressional
committees and subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on National Security, Committee on Appropriations
House Committee on Government Reform and Oversight
House Subcommittee on Government Management, Information, and Technology,
Committee on Government Reform and Oversight
House Subcommittee on National Security, International Affairs, and Criminal
Justice, Committee on Government Reform and Oversight
House Committee on National Security

Part III - Management Comments

Acting Deputy Under Secretary of Defense (Logistics) Comments



ACQUISITION AND
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

16 DEC 1997

(L/MDM)

MEMORANDUM FOR DIRECTOR, FINANCE AND ACCOUNTING DIRECTORATE, DODIG

SUBJECT: Response to the Draft Report entitled "Defense Business Operations Fund Inventory Record Accuracy," dated October 15, 1997 (Project No. 5FJ-2018.03)

This memorandum responds to your request dated October 15, 1997, requesting comments on subject draft report. This office partially concurs with the recommendations in Section B.

Recommendation 8.1. Partially concur. The Chairman of the Joint Physical Inventory Work Group (JPIWG) was requested on September 10, 1997 to task the JPIWG to develop a DOD inventory record accuracy standard during the January 1998 meeting. Upon adoption of the standard, each component will develop a plan and time line to measure their inventory record accuracy.

Recommendation B.2. Non-concur. With the disestablishment of the DBOF and establishment of the Component Working Capital Funds, it will be the responsibility of each of the Military Services and Defense Agencies to establish a methodology to develop the samples for comparison against the inventory record accuracy goal.

Recommendation B.3. concur. DOD 4140.1-R, "Material Management Regulation" and DoD 4000.25-2-M, "Military Standard Transaction Reporting and Accounting Procedures" direct the Components to perform annual random statistical samples.

The Defense Logistics Agency (DLA) will respond to your office on the findings and recommendations in Section A. We appreciate the opportunity to comment on this audit report in draft form.

Roy R. Willis
Roy R. Willis

Acting Deputy Under Secretary
of Defense (Logistics)



Defense Logistics Agency Comments



DEFENSE LOGISTICS AGENCY
HEADQUARTERS
8725 JOHN J. KINGMAN ROAD, SUITE 2533
FT. BELVOIR, VIRGINIA 22060-6221

11 DEC 1997


IN REPLY
REFER TO

DDAI

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING
DEPARTMENT OF DEFENSE

SUBJECT: Draft Report on Defense Business Operations Fund
Inventory Record Accuracy (Project No. 5FJ-2018.03)

This is in response to your October 15, 1997, subject draft report. For any questions, call Elaine Parker. 767-6264.


JEFFREY GOLDSTEIN
Chief (Acting), Internal Review

CC:
MMB
MML

SUBJECT: Defense Business Operations Fund Inventory Record Accuracy, 5FJ-2018.03

FINDING A: Inventory Record Accuracy.

DBOF inventory records were not accurate. An estimated 15.8 percent, or about one of every six DBOF inventory records represented by our sampling, was in error (see Appendix A for confidence level and precision of estimates.) The errors caused DBOF inventory records to be misstated (overstated and understated) by an estimated \$3.9 million. The net amount of those errors was an estimated \$336.3 million understatement of the \$89 billion of on-hand inventory used to prepare the FY 1996 DBOF financial statements. That net amount of error made the value of the **sampl**ed portion of the DBOF inventory on the financial statements appear accurate because the overstated amounts offset most of the understated amounts. However, the 15.8 percent error rate represented a material management control weakness.


The inaccurate perpetual inventory records existed because inventory records maintained by the DLA distribution depots and Military Department depots were not reconciled with the inventory record maintained by the DLA inventory control points (ICPs), and because various errors occurred in processing inventory transactions. The inaccurate records greatly limited the reliability of the financial data. Inaccurate inventory records also distorted the reports used by inventory managers who were making decisions to buy materials. The inaccurate records will result in ineffective logistics support when military customers urgently need inventory.

DLA COMMENTS:

Partially concur. The conditions which resulted in the inaccurate inventory records between the distribution depots and the DLA ICPS have been corrected as reported in our response to the recommendations. However, we feel there exists some inconsistencies in the audit finding. The finding states that "the inaccurate records greatly limited the reliability of the financial data." This is contradicted by the statement on page 5, "the value reported on the (financial) statements is within an acceptable range." Based on the data presented in the audit, the DBOF Inventory value is 95.7% accurate. Since this is within an acceptable range, the audit proceeds to focus on inventory record accuracy whereby any deviation between the bin and recorded quantity is in error. Using this method of zero tolerance in record accuracy measurement fails to consider the magnitude of the error. While the DBOF record accuracy was only 84.2%, the magnitude of those record errors was within an acceptable range as is evidenced by the 95.7% inventory dollar accuracy. While the DoD logistics community has favored inventory record accuracy as a measurement of inventory and logistics processes, we have also tempered it by allowing acceptable tolerances, within material stratifications, to account for the "impact" of the error in both readiness and financial aspects. While it is **certainly ideal to have 100%** inventory record accuracy, the characteristics of some items do not warrant the expenditures to achieve and maintain the Inventory record accuracy at 100%.

INTERNAL MANAGEMENT CONTROL WEAKNESS: Partially Concur

Defense Logistics Agency Comments

ACTION OFFICER: Steven C. Soisson, MMLDA, (703) 767-2534
REVIEW/APPROVAL: D. P. Keller, RADM, SC, USN, Executive Director, Logistics
Management
COORDINATION: Elaine ~~Prater~~, DDAL, 767 6264
DLA APPROVAL:  DEC 0 1997

B.R. CHAMBERLIN
Rear Admiral, SC, USN
Deputy Director

Defense Logistics Agency Comments

SUBJECT: Defense Business Operations Fund Inventory Record Accuracy, 5FJ-2018.03

Recommendation A.1: We recommend that the Director, Defense Logistics Agency expedite actions to correct the automated location reconciliation program to provide periodic reconciliations of the inventory records maintained by the Defense Logistics Agency inventory control points with the records maintained by Defense Logistics Agency distribution depots, Military Department depots, and other storage locations.

DLA COMMENTS:

All required changes were made and the quantitative location reconciliation process has been operational between the DLA ICPs and the distribution depots operating DSS since July 1997. As DSS is implemented in the former service depots, a location reconciliation is scheduled in the first month possible regardless of the DLA policy schedule for that particular depot. Additionally, DSS is capable of reconciling the depot records with any MILSVC ICP system that can process the quantitative location reconciliation.

DISPOSITION: Action is considered complete:

ACTION OFFICER: Steven C. Soisson, MMLDA, (703) 767-2534

REVIEW/APPROVAL: D. P. Keller, RADM, SC, USN, Executive Director, Logistics Management

COORDINATION: Elaine Parker, DDAI, 767-6264

DLA APPROVAL:


E.R. CHAMBERLIN
Rear Admiral, SC, USE,
Deputy Director

DEC 10 1997

SUBJECT: Defense Business Operations Fund Inventory Record Accuracy, 5FJ-2018.03

Recommendation A.2.: We recommend that the Director, Defense Logistics Agency establish a schedule for implementing the location reconciliations and for evaluating the causes of significant discrepancies found during the reconciliations.

DLA COMMENTS:

DLA Policy requires each ICP/depot combination reconcile their records at least once quarterly. The schedule has not yet been published in the DLAM 4140.2 Vol II, but the appropriate tables within SAMMS and DSS contain the schedule. The procedures for researching and evaluating discrepancies have been provided to the ICPs. They will be incorporated in the DLAM 4140 2 Vol II, during the next scheduled update. A copy of the procedures is available upon request.

ICP	Month of Quarter	Depot RIC
S9C	1	AQ5, SBC, NBZ, NN , PTZ, ND , NU
	2	SAC, SNC, B52, BR4, BY6, BA4
	3	SRC, SCC, FG , FL , FH , MAB, SG2
S9E	1	AQ5, SBE, NBZ, NN , PTZ, ND , NU
	2	SAE, SNE, B52, BR4, BY6, BA4
	3	SRE, SCE, FG , FL , FH , MAB, SG2
S9G	1	SBG, SAG, NBZ, NN , PTZ, ND , NU
	2	SRG, B52, BR4, BY6, BA4
	3	SNG, AQ5, SCG, FG , FL , FH , MAB, SG2
S9I	1	SNi, SBI, SAI, NBZ, NN , PTZ, ND , NU
	2	SRI, B52, BR4, BY6, BA4
	3	AQ5, SCI, FG , FL , FH , MAB, SG2
S9M	1	AQ5, SRM, SCM, NBZ, NN , PTZ, ND , NU
	2	SNM, SAM, B52, BR4, BY6, BA4
	3	SBM, FG , FL , FH , MAB, SG2
S9T	1	SAT, SNT, NBZ, NN , PTZ, ND , NU
	2	AQ5, SBT, B52, BR4, BY6, BA4
	3	SCT, SRT, FG , FL , FH , MAB, SG2
S9S	Monthly	All Sites

DISPOSITION: Action is considered complete.

Defense Logistics Agency Comments

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DLA APPROVAL:



DEC 10 1997

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